# Nature Notes



News and Events from the Missouri Department of Conservation • October/November/December 2014

### **Migration**

# Conservation across continents

all is upon us, bringing cool evenings, colorful leaves, and a flurry of animal activity as wildlife prepares for the coming winter. While squirrels stock up on acorns and reptiles search for a safe spot to wait out the cold weather, many animals are migrating to new homes.

Migrators use a variety of strategies as they search for food sources and warmer weather. Mountain species may only change altitude, moving up and down the slopes as food sources change. Some species migrate relatively short distances, such as bats that move from breeding habitats in northern Missouri to hibernate in large groups in the caves of southern Missouri. For other species, migration means traveling long distances, sometimes spanning thousands of miles across countries and even continents.

Long-distance migrations include many species of birds. We enjoy the spectacle of ruby-throated hummingbirds darting about during the summer, but they spend their winters ranging from southern Florida to South America. Some must fly non-stop across the Gulf of Mexico to reach their seasonal habitats. The peregrine falcon sometimes migrates from as far north as Alaska to southern South America.

Other migrants move from their summer homes in the far north to winter homes here in Missouri. Dark-eyed juncoes are common around winter birdfeeders, and snowy owls are occasional visitors to our state.

How do these birds find their way on their



The dark-eyed junco, Junco hyemalis, is a common winter resident in Missouri

long distance travels? Scientists have been studying bird migration for many years and still do not have all the answers. Birds do have amazing abilities to navigate using the position of the sun and stars, and some have a sort of magnetic sense that helps guide them.

These long-distance migrations present a challenge for bird conservation. Habitats for migratory birds need to be protected throughout their range, from breeding grounds in the north to winter feeding sites in the south and across the migratory paths between them. This requires coordination between the people and governments of multiple states and countries.

A variety of conservation organizations devote their efforts to researching and protecting migratory birds and their habitats. Bird population information is sometimes collected through

"citizen scientists" during annual bird counts, such as the National Audubon Society's Christmas Bird Count. These organizations work with state agencies and international governments in projects to promote bird-friendly agricultural practices and work toward the creation of protected habitats for migratory birds.

The Missouri Department of Conservation provides resources for individuals to learn about and create healthy habitats for birds. Stop by the Northeast Regional Office on Highway 63 just south of Kirksville or visit mdc.mo.gov for free publications, including *Enjoying Missouri's Birds, Native Plants for Your Landscape,* and *Missouri Woodpeckers*.

—Amanda Moore, Naturalist

All Missouri Department of Conservation Offices will be closed for the following holidays:

Columbus Day-October 13, 2014 Veteran's Day-November 11, 2014 Thanksgiving-November 27, 2014 Christmas-December 25, 2014

## Northeast Regional Office and Interpretive Center

3500 S. Baltimore, Kirksville, MO 63501 • mdc.mo.gov/node/279



The Northeast Regional Office and Interpretive Center is located just south of Kirksville on Hwy 63. Come inside to enjoy exhibits, attend programs, purchase permits, pick up free conservation brochures, or browse the Nature Shop. Head outside to walk the habitat trail or fish in the stocked pond.

#### **HOURS**

Building: Monday-Friday, 8 AM-5 PM Trail and Pond: Daily, 4 AM-10 PM

#### TO REGISTER FOR A PROGRAM

Programs are free. Call 660-785-2420 to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

#### **October Events**

#### Knee High Naturalists Leaf Hunt

October 6 • Monday 10:30–11:30 AM

No registration required (ages 3-6)
Fall is here, bringing us colorful changes in the forest! Why are the leaves turning red, orange, and yellow? Join us for a story, hike, and activity that will help us discover the answers.

## Creature Feature Changing Colors

October 8 • Wednesday 3:30–4:30 PM

No registration required (ages 7-12) Fall brings us cooler weather and shorter days, along with colorful changes in the leaves of the forest. Why do autumn leaves turn red, yellow, and orange? Join us for some hands-on experimentation as we discover the chemistry behind changing colors!

#### Conservation Keepers Spider Sniffing

October 18 • Saturday • 8–9 PM No registration required (all ages) Join us for an evening adventure discovering spiders. We will start in the classroom discovering the amazing abilities spiders have. Then we will practice some spider-hunting techniques before heading outside to put our new skills to the test!

### Knee High Naturalists Cave Creatures

October 20 • Monday 10:30–11:30 AM No registration required (ages 3-6) Dark, damp, and just a little scary—



who would want to live in a cave? Go spelunking with us to meet some critters that call caves "home sweet home." (Not to worry, parents, our cave tour will stay inside the classroom!).

### Creature Feature Cave Creatures

October 22 • Wednesday 3:30–4:30 PM

No registration required (ages 7-12)
Dark, damp, and just a little scary—
who would want to live in a cave?
Go spelunking with us to meet some
critters that call caves "home sweet
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## Northeast Regional Office and Interpretive Center

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#### **November Events**

#### **Knee High Naturalists Birds in Motion**

November 3 • Monday 10:30-11:30 AM No registration required (ages 3-6) There are some birds that we can see no matter what time of year it is, but others are only here part of the time. Where do these birds go? Why do they move from place to place? Join us as we explore the stories behind migrating birds!



November 12 • Wednesday 3:30-4:30 PM

*No registration required (ages 7-12)* November is the month for Thanksgiving, which for many of us means turkey dinner with family. Wild turkeys were once almost eliminated from Missouri, but today they are a popular hunting target. Join us to discover the life history of the wild turkey!

#### **Knee High Naturalists** Gobble, Gobble

November 17 • Monday 10:30-11:30 AM No registration required (ages 3-6) November brings us Thanksgiving,

which often makes us think of turkeys.





Wild turkeys are very different from farm turkeys, though. Join us for a story and craft as we explore the life of a wild turkey in Misosuri!

#### Conservation Keepers **Capturing Nature**

November 15 • Saturday • 1–2 PM No registration required (all ages) Pictures are a great way to preserve your outdoor experiences. Capturing your favorite scenes and moments in nature can be as simple as aiming and pushing a button, but some tips and techniques can help you grab the best pictures. Please bring a camera to the program!

#### **December Events**

#### **Knee High Naturalists** Deep Sleep

December 1 • Monday 10:30-11:30 AM

No registration required (ages 3-6) Reptiles and amphibians need warm days to be active. What do they do during the cold winter? They sleep! Some mammals sleep through the winter, too, including black bears. Join us to learn about hibernating animals in Missouri.

#### **Nature Craft Night**

December 10 • Wednesday • 6-8 PM Register by December 5 (all ages) It's time for our annual holiday nature crafting event! Bring your family to make ornaments, decorations, and bird feeders out of a variety of natural items. Registration begins November 10.

#### **Knee High Naturalists Fox Tales**

December 15 • Monday 10:30-11:30 AM

*No registration required (ages 3-6)* Foxes are frequent characters in stories and shows, often shown as smart or sneaky. Missouri is home to two kinds of fox-the red fox and the grey fox. Discover more about our fabulous foxes with us!

#### **Conservation Keepers Tracks and Signs**

December 20 • Saturday • 1-2 PM No registration required (all ages) We may not always get to see wild animals when we take a nature hike, but we often see the tracks they leave behind. Learn to recognize some common tracks, practice identification on our nature hike, and make a track mold to take home!

### **Hunter Education**

mdc.mo.gov/node/3722



These free courses are required for anyone born on or after January 1, 1967, who wants to hunt with firearms in Missouri. Hunters under 15 years of age who will be hunting with a properly permitted hunter age 18 or over, hunters that are 16 or older and have an Apprentice Hunter Authorization, or landowners or lessees hunting on land that they own or reside upon are exempted from the hunter education requirement. Anyone age 11 or older may take the hunter education course and become certified.

There are two parts of the hunter education requirements, knowledge and skills. The knowledge portion can be completed through one of three options. An online course is available, as well as a self-study guide and a classroom session. Once the knowledge portion is completed, hunters must attend and pass a 4-hour skills session to become hunter education certified. Registration for classes is available online.

If you have any questions about hunter education, please contact Outdoor Skills Specialist Rob Garver by calling 660-785-2420.

### Educator's Corner

mdc.mo.gov/node/92

### **Preserving Fall Leaves**

Fall is upon us and soon we will be enjoying the many colors of autumn. How fun it would be to keep those colors through the dull gray of winter! You may have tried the wax paper pressing method of preserving leaves as a child, but there is another simple method to try. The glycerin method leaves the leaf supple. It works because the natural moisture present in the leaves is replaced by the glycerin solution, maintaining the leaf's texture and form. Glycerin is a natural product derived from vegetables, making this a fairly organic option to preserving your leaves. Color is not always retained to its original splendor.

#### **What You Need:**

- •Glycerin found in the pharmacy section
- Water
- •Flat pan
- •A weight or something to keep leaves submerged
- Leaves

#### **What You Do:**

- 1. Mix one part glycerin and two parts water. You only need about one cup.
- 2. Pour the solution into the flat pan.
- 3. Place the leaves in the solution.
- 4. Put the weight on the leaves to keep them submerged.
- 5. Keep the leaves submerged in the solution for 2-6 days.
- 6. Dry the leaves gently with a paper towel. They should feel soft and pliable.



Preserve fall leaves with a simple solution



#### Ask the Naturalist

This summer, I was given two mussel shells with a request to identify them. Some mussels can be difficult to identify, especially older shells that are weather-worn. I knew that I wanted to verify my identification with our natural history biologist, Krista Noel, so I let the gentleman know I would get back to him on it.

Luckily, both of the shells had some distinctive characteristics that made identification easier. The first shell was thick, with ridges running across it from the umbo (beak) to the outer edge. On the inside, it had large teeth and was irridescent at one end. The species that best fit was the threeridge (Amblema plicata).

The second shell was much thinner and had no teeth at all. There are only a handful of mussel species without teeth in Missouri, so the possibilities were quickly limited. The shape of the shell and the brown color of its periostracum (the thin coating on the outside of the shell) left only one species that fit. It was the shell of a giant floater (Pyganodon grandis).

I have also recently had the opportunity to identify a caterpillar (waved sphinx moth, Ceratomia undulosa) and even a fly puparium (mydas fly, Mydas clavatus). I enjoy identification requests because they often test my knowledge and my research abilities.

Identification can often be made from high quality pictures, but a specimen is even better. Stop by the regional office with your requests!

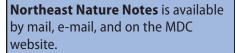
> —Amanda Moore Naturalist



Above: Giant floater, Pyganodon grandis. Top picture shows the worn but visible periostracum, lower picture shows the lack of teeth.

Left: Threeridge, Amblema plicata. Far left picture shows the ridges on the outside of the shell, near left shows the large teeth inside the shell.





To be added to the mail or e-mail registry, or to switch from one to the other, please contact Amanda Moore at amanda.moore@mdc.mo.gov or call 660-785-2420.

The online version of the newsletter is available at mdc.mo.gov/node/17875.

A full event calendar for the Northeast region is also available on the MDC website.



#### **Fun and Free**

Stop by the MDC Northeast Regional Office in Kirksville during office hours to check out a Discover Nature backpack. These backpacks give you a self-guided tour of the natural world as you walk the habitat trail.

Backpacks can be checked out at the front desk. Each backpack is loaded with tools and information to enhance your experience, from magnifiers and measuring tapes to field guides and a nature journal.



# Seed Buying List 2014

Missouri Department of Conservation, Northeast Regional Office 3500 S. Baltimore St. Kirksville, MO 63501 660-785-2420



### We will ONLY be taking seed on the dates listed below:

Friday, October 3<sup>rd</sup> – 8:00 am to 4:00pm Friday, October 17<sup>th</sup> –12:00 pm to 5:00 pm Friday, October 31<sup>st</sup> – 8:00 am to 1:00 pm Friday, November 7<sup>th</sup> – 8:00 am to 3:00 pm

We reserve the right to stop buying seed once our needs are met.

Before you collect, please call our office to find out if we are still buying seed.

<b>Species Purchased</b>	<u>Price</u>
Mixed Oak	\$ 0.10/LB
Bur Oak	\$ 0.35/LB Seed must be a minimum of 1 inch.
Black Oak	\$ 0.55/LB
White Oak	\$ 0.35/LB
Northern Red Oak	\$ 0.65/LB
Swamp White Oak	\$ 1.05/LB
Shellbark Hickory	\$ 0.45/LB
Mixed Hickory	\$ 0.35/LB
Hazelnut*	\$ 1.70/LB  Seed must be mature, light brown and easily pulled from the husk.  No green or partially green husks will be accepted.
Wild Plum*	\$ 0.80/LB of fruit  Must be ripe-yellow red or orange. NO partially green fruit will be accepted.
Black Cherry*	\$ 3.00/LB of fruit
Ohio Buckeye	\$ 0.50/LB without hulls
Kentucky Coffee Tree	\$ 6.00/LB no pods, seed only
Elderberry*	\$ 1.75/LB
Redbud	\$ 2.25/LB PODS  Pods must be brown in color & have seed that is light brown & filled out, not black. Green seed pods will not be accepted.

<sup>\*</sup>Hazelnut, Wild Plum, Black Cherry & Elderberry: Please call in July/August to set up a time to bring in this seed.



# **Nature Craft Night**

Wednesday, December 10, 2014 6:00-8:00 PM **MDC Northeast Regional Office** 

It's time for our annual evening of holiday crafts. A wide variety of natural items will be available to make into tree ornaments, gifts, or bird feeders, so bring your family to enjoy this night out together.

Registration for this free family event runs from 8 AM on November 10 to 5 PM on December 5. Space and supplies are limited, so call Karen at 660-785-2420 to add your group to the list!



## discover nature programs ...

- · Help Missourians discover and explore nature
- · Provide expert instruction and hands-on activities
- Are available statewide





#### **Share the Harvest**

If you plan to hunt this fall but don't want or need to keep the meat from your deer, consider participating in Share the Harvest. The Share the Harvest program helps hunters share their deer meat with families in need.

Participating in Share the Harvest is easy-just take your deer to an approved meat processor and let them know how much meat you wish to donate. When a whole deer is donated, there are options for reduced and sometimes even free processing. Just check with the processor to find out what options are available in your area.



Families gathered at the Northeast Regional Office on Saturday, September 20 for a viewing of the film *The Lost Bird Project*. After the film, they worked to create a group of origami passenger pigeons to be included in the virtual flock at foldtheflock.org.



#### **Snowy Owls in Missouri**

The snowy owl, *Bubo scandiacus*, is a rare visitor to Missouri in the winter. It makes its summer home on the tundra north of the Arctic circle, where it nests on the ground and feeds primarily on rodents called lemmings. Unlike other owls, the snowy owl is active during the daylight hours-a necessity in regions that get 18 or more hours of light each day!

Why do these owls end up in Missouri some years when they are completely absent in others? Until recently, it was thought that lack of food drove the owls further south. Current research tells a different story, though. Snowy owls will lay 9 or more eggs during years with high lemming populations, while sometimes skipping breeding completely when food is scarce. The population boom of young snowy owls during years of abundance leads to larger and more southern migrations called irruptions.

This past winter, snowy owls irrupted in greater numbers and further south than has been seen in decades. One owl was even reported as far south as Bermuda! It is impossible to predict what the coming winter will bring, but an irruption like last year's is unlikely. Snowy owls prefer to be able to see over long distances, so open spaces and high perches are the best bets to spot one of these rare, beautiful birds. When they visit Missouri, they are most likely to be seen from mid-November through February.

